

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of Application of)	
)	
COUNTY OF WESTCHESTER)	File No. 0001801202
)	
To Operate a Public Safety Radio)	
Communications System in Frequency Band)	
470-480 MHz in Westchester County, New York)	

ORDER

Adopted: November 24, 2004

Released: November 29, 2004

By the Chief, Public Safety and Critical Infrastructure Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. We have before us an application and a waiver request filed by the County of Westchester, New York, (“Westchester” or “the County”) for authority to operate a public safety radio system on ten UHF frequencies¹ in the New York Metropolitan area.² Westchester seeks a waiver, pursuant to Section 337(c) of the Communications Act of 1934, as amended (the Act),³ of Sections 22.621, 22.651 and 90.303 of the Commission’s Rules,⁴ to use currently unassigned frequencies allotted for non-public safety use.⁵ For the reasons stated herein, we grant Westchester’s waiver request.

II. BACKGROUND

2. Westchester is part of the New York City metropolitan area, located north of the Bronx, and has a population of one million people.⁶ Several major corporate headquarters such as those of IBM and Pepsico are based in the County, and Westchester provides electricity to the metropolitan area and water

¹ Frequencies in the 300 MHz to 3 GHz range are Ultra High Frequencies (UHF), but land mobile frequencies in the 450-512 MHz range are sometimes known as the land mobile “UHF band.” In this *Order*, references to UHF mean 450-512 MHz. *See, e.g.*, Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Notice of Proposed Rule Making*, WT Docket No. 99-87, 14 FCC Rcd 5206, 5215 ¶¶ 11-12 (1999).

² *See* FCC File No. 0001801202, County of Westchester (filed July 8, 2004) (Request), as amended on August 2, 2004, August 20, 2004 (August 20, 2004 Amendment), September 14, 2004, and September 17, 2004. The original application requested the use of frequency pairs 476/479.0750, 476/479.1125, and 476/479.2125 MHz. On August 20, 2004, Westchester amended its application to request the use of frequency pairs 470/473.0750 and 470/473.1000 MHz.

³ 47 U.S.C. § 337(c).

⁴ 47 C.F.R. §§ 22.621, 22.651, 90.303. Westchester also requested waiver of any other Commission rules that are necessary to grant its application. *See* Request at 1.

⁵ *See* Request at 1.

⁶ *Id.*

to New York City.⁷ Westchester asserts that due to its adjacency to New York City, a public safety incident in the County could affect New York City and vice versa.⁸

3. Westchester states that its limited amount of spectrum is inadequate to accommodate its public safety needs.⁹ The County notes that its current frequencies are spread across several frequency bands, are overcrowded, and are inadequate for multiple incident response.¹⁰ Westchester states that the purpose of a proposed new system is to upgrade its existing antiquated radio systems operating in various frequency bands in order to provide badly needed reliable communications and interoperability among all public safety and local government agencies throughout the county.¹¹ Westchester plans to operate its public safety communications system in two zones, with each zone using different frequencies.¹² Westchester is licensed to operate Station WPVA646, Valhalla, New York, but Westchester states that none of the UHF, trunked frequency pairs on that license can be used in the southern part of the county, closer to New York City, without causing or receiving interference. Therefore, Westchester proposes to use frequencies from Station WPVA646 in the northern zone.¹³ Westchester seeks the subject frequency pairs for trunked use in the southern zone.¹⁴ Ultimately, Westchester plans to add another frequency pair (for a total of six frequency pairs) to be used in the southern zone, for which Westchester will apply when a frequency pair becomes available.¹⁵

4. Because the requested frequencies are not designated for public safety use, Westchester requires a waiver of Sections 22.7, 22.501, 22.621, 22.651, 90.303, and 90.311 of the Commission's Rules.¹⁶ Westchester seeks such a waiver pursuant to Section 337(c) of the Act.¹⁷

5. On September 1, 2004, the Wireless Telecommunications Bureau placed Westchester's

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* at 2.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* at 3, Attachment 2, Analysis of Frequency Availability for Westchester County Public Safety Communications by Vogel Consulting Group, Inc. (Vogel Report) at 3.

¹³ *Id.*

¹⁴ *Id.*, August 20, 2004 Amendment at 1.

¹⁵ Request at 2-3, August 20, 2004 Amendment at 1.

¹⁶ 47 C.F.R. §§ 22.7, 22.501, 22.621, 22.651, 90.303, 90.311. Section 22.7 limits eligibility to operate on Part 22 frequencies to common (*i.e.*, commercial) carriers. Section 22.501 defines the scope of the licensing and operation of the public paging and radiotelephone service. Section 22.621 requires the use of point-to-multipoint operation on five of the requested frequencies. Section 22.651 requires the use of trunked mobile operations on the other five frequencies requested. *But see* 47 C.F.R. § 22.655 (FCC is redesignating public mobile channels in the 450-470 MHz range from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreases). Section 90.303 provides frequencies available for assignment to land mobile systems, referring to Section 90.311, which excludes frequencies in the 470-512 MHz range from assignment to private land mobile radio applicants if the frequencies are allocated for services under Part 22.

¹⁷ *See* 47 U.S.C. § 337(c).

application and waiver request on public notice.¹⁸ The Commission received comments from the State of New Jersey (New Jersey)¹⁹ and reply comments from Westchester.²⁰ New Jersey seeks to use channels adjacent to those sought by Westchester.²¹ Thus, New Jersey requests the Commission to formalize what Westchester has recited in its application and waiver request, *i.e.*, that it will undertake efforts to coordinate and protect the relevant channels of New Jersey, Bergen County, and the Jersey City, New Jersey Police Department and other relevant agencies.²² New Jersey requests that the coordination occur during the construction and implementation period; and that the Westchester system be tested, so that each party can protect the other from interference. It also proposes that each party provide reasonable notice to the other of changes that could reasonably be viewed as significant once operations commence.²³ Finally, New Jersey requests that the Commission obtain an analysis and recommendation from Westchester's frequency coordinator consistent with the propagation/coverage protocols embodied within the model developed by the Telecommunications Industry Association, Working Group 8.8 in applying interference criteria and calculation methods for wireless communications in the band.²⁴ Under these conditions, New Jersey has no objection to Westchester's request.²⁵ In its reply comments, Westchester reaffirms its commitment to coordinate usage of its frequencies with all public safety users in New Jersey so as to avoid any harmful adjacent channel interference.²⁶

III. DISCUSSION

6. Section 337(c) of the Act provides that the Commission must waive any rules necessary to authorize entities providing public safety services to operate on unassigned non-public safety spectrum, if the Commission makes five specific findings:

- public safety spectrum is not immediately available;
- the proposed use will not cause harmful interference to protected spectrum users;
- public safety use of the unassigned frequencies is consistent with public safety spectrum allocations in the geographic area;
- the unassigned frequencies have been allocated for non-public safety use for more than two years; and

¹⁸ See Wireless Telecommunications Bureau Seeks Comment on Request for Waiver by the County of Westchester, New York to Operate a County-Wide Public Safety Radio System Utilizing Ten UHF Paging Control Frequencies, *Public Notice*, 19 FCC Rcd 17392 (WTB PSCID 2004).

¹⁹ See Comments of State of New Jersey (filed Sept. 22, 2004) (New Jersey Comments).

²⁰ See Westchester Reply Comments (filed Oct. 4, 2004) (Westchester Reply Comments).

²¹ See New Jersey Comments at 2. New Jersey has applied for use of frequency pair 470/473.0875 MHz, adjacent to Westchester's requested frequency pairs 470/473.0750 and 470/473.1000 MHz. See FCC File No. 0001855193.

²² See New Jersey Comments at 2.

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ Westchester Reply Comments at 1-2.

- grant of the application is consistent with the public interest.²⁷

7. Public safety services are services whose principal purpose is to protect the safety of life, health, or property, provided by governmental entities whose primary mission is the provision of such services, or by non-governmental entities authorized by such a governmental entity, and that are not made commercially available to the public.²⁸ Based on the record before us, we find that Westchester is an entity providing public safety services.²⁹ We therefore move to examining whether Westchester meets the statutory requirements supporting a waiver under Section 337(c) of the Act.

8. *Immediate availability of public safety spectrum.* Westchester contends no public safety spectrum is immediately available that would support its proposed radio system.³⁰ In support of its contention, Westchester submitted a spectrum analysis report compiled by an engineering consulting firm.³¹ This report made the following observations:

- The 150-160 MHz band has no available frequencies that meet the requirements of Westchester;
- The 450-454 and 460-466 MHz bands have no available frequencies that meet the requirements of Westchester;
- 470-473 MHz and 476-479 MHz bands contain 6.25 kHz bandwidth channels, but these frequencies are not available from a practical standpoint because no manufacturer provides 6.25 kHz equipment. The report further states these channels cannot be coordinated due to the close proximity of existing co-channel or adjacent channel users;
- The 482-488 MHz band was permanently allocated to land mobile service for public safety communications on April 9, 2004. Assignment of individual channels to agencies is performed by the New York Metropolitan Advisory Committee (NYMAC). The report includes a letter from the NYMAC Chairman indicating that there are no available channels for use in southern Westchester County;³²
- The 764-776 and 794-806 MHz bands, while designated for public safety use, are not immediately available for Westchester because existing television broadcast stations use these frequencies;
- The 806-821 and 851-866 MHz bands do not have unassigned channels;

²⁷ See 47 U.S.C. § 337(c).

²⁸ See 47 U.S.C. § 337(f).

²⁹ See Nassau County Police Department, *Memorandum Opinion and Order*, 17 FCC Rcd 14252, 14258 ¶ 11 (2002).

³⁰ Request at 2, Vogel Report at 4-5.

³¹ *Id.*

³² Vogel Report, Appendix E, Letter dated July 8, 2004 from Vincent Stile, Chairman, NYMAC, to Thomas R. Raffaelli, Program Coordinator Radio, County of Westchester.

- The 821-824 and 866-869 MHz bands have no wide-area channels available to Westchester according to survey of the National Public Safety Planning Advisory Committee.³³

The spectrum analysis report is supported by a letter from the Association of Public-Safety Communications Officials International, Inc. (APCO), an FCC-certified public safety frequency coordinator.³⁴ Based on the record before us, we concur with Westchester's contentions and find that no other public safety spectrum is immediately available to satisfy the requested public safety service use.

9. *Technical feasibility of requested use without causing harmful interference.* Westchester's proposed frequencies are in the 470-480 MHz band, which is allocated on a geographically-shared basis with television broadcast stations.³⁵ In the New York City metropolitan area, the Commission regulates the ten requested frequencies under Part 22 of its Rules.³⁶ Specifically, the Commission has designated five of the frequencies requested herein for point-to-multipoint transmitters used to support transmitters that provide public mobile service, *i.e.*, paging control.³⁷ The other five frequencies requested herein are designated for trunked mobile operations, although the Commission is redesignating channels in this range for point-to-multipoint operation as demand decreases for trunked mobile operations.³⁸ Westchester provided an analysis of potential interference and concluded that use of these channels by Westchester is technically feasible and will not cause harmful interference to other spectrum users entitled to protection from interference.³⁹ Westchester also meets the spacing requirements for co-channel and adjacent channel TV stations.⁴⁰ Westchester provided APCO's certification that Westchester's proposed radio system will not interfere with other licensed and proposed public safety systems.⁴¹ Based on the record before us, we believe the operational and technical parameters of Westchester's proposed system meet the Commission's requirements for interference protection to incumbent public safety licensees. Moreover, we note that the potential for interference to adjacent channel users is further diminished because Westchester will use 12.5 kHz bandwidth equipment on frequencies designated under Part 22 for 20 kHz bandwidth.⁴² We therefore find that Westchester's proposed system is technically feasible and will not cause harmful interference to protected spectrum users.

³³ Vogel Report at 4-5.

³⁴ Vogel Report, Appendix A, Letter dated June 18, 2004 from Joseph L. Yurman, P.E., APCO Local Advisor, Southern New York State, APCO International, to Mr. Thomas R. Raffaelli, Program Coordinator (Radio), Westchester County – Department of Information Technology.

³⁵ Frequencies in the 470-512 MHz band, normally assigned to UHF Television channels 14 through 20, were made available for land mobile radio use in 11 cities in the early 1970s in the "UHF-TV Sharing" proceeding. *See* Land Mobile Use of TV Channels 14 through 20, Docket No. 18261, *Report and Order*, 23 FCC 2d 325 (1970).

³⁶ 47 C.F.R. § 22.1 *et. seq.*

³⁷ *See* 47 C.F.R. §§ 22.621, 22.627.

³⁸ *See* 47 C.F.R. §§ 22.621, 22.651, 22.655.

³⁹ Vogel Report at 7-10.

⁴⁰ *Id.* at 6-7.

⁴¹ *See* Letter dated Oct. 18, 2004 from Lieutenant Anthony Melia, APCO New Jersey Frequency Advisor, APCO International, to Michael Wilhelm, Chief, Public Safety and Wireless Division, Federal Communications Commission.

⁴² Request at 3. *See* 47 C.F.R. § 22.621.

10. *Public safety use of the frequencies is consistent with other public safety spectrum allocations in the geographic area.* As Westchester notes, the frequencies it proposes to use in its public safety communications system are within a frequency band where public safety land mobile radio operations are authorized, and more importantly are currently being used by other public safety agencies in the New York City metropolitan area (e.g., New York City, Nassau County, and Rockland County).⁴³ We therefore find that the use of the unassigned frequency pairs for the provision of the proposed public safety services is consistent with other allocations for the provision of such services in the geographic area specified in the application. Moreover, because other agencies in the New York City metropolitan area are using these frequencies, we believe that granting the request will promote interoperability among public safety community in this area.

11. *The frequencies have been allocated for non-public safety use for more than two years.* The Commission allocated these frequencies for non-public safety use in 1994.⁴⁴ Thus, these frequencies have been allocated for their present use for more than two years.

12. *Granting this application is consistent with the public interest.* We believe Westchester's filings demonstrate that access to additional spectrum is needed in order to promote effective public safety communications. As described by Westchester, granting the applications and waiver request would be in the public interest as it will cure deficiencies in the existing public safety radio systems and provide interoperability between various fire departments, police departments, EMS corps, and hospitals in Westchester County.⁴⁵ The proposed system would be free of interference from other users in the New York area and would be adequate for response to multiple incidents.⁴⁶ We believe that it would further the public interest by affording Westchester's public safety community the necessary spectrum to allow it to safely protect the lives and property in its care. Indeed, Section 1 of the Act defines one of the Commission's over-arching purposes as "promoting safety of life and property through the use of ... radio communication."⁴⁷ We find it significant that granting the instant request will promote interoperability capability among the public safety community in the New York City metropolitan area.

13. We agree with New Jersey that Westchester should fulfill its commitment to coordinate its use of the requested frequencies. This will promote efficient use of spectrum while avoiding harmful interference to other public safety entities. Therefore, we expect Westchester coordinate usage of its frequencies with the relevant public safety users in New Jersey so as to avoid any harmful adjacent channel interference.

IV. CONCLUSION

14. We conclude on the record before us that Westchester's waiver request satisfies the criteria set forth under Section 337(c) of the Act to obtain a grant of its application to operate a public safety communications system on frequencies in the 470-480 MHz band. We therefore grant Westchester's request.

⁴³ Request at 3.

⁴⁴ See Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, *Report and Order*, CC Docket 92-115, 9 FCC Rcd 6513 (1994).

⁴⁵ Request at 2.

⁴⁶ *Id.*

⁴⁷ 47 U.S.C. § 151.

V. ORDERING CLAUSES

15. Accordingly, **IT IS ORDERED** that, pursuant to Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 337(c), the request for waiver associated with the captioned application filed by the County of Westchester on July 8, 2004, as amended, to use frequencies 476/479.0750, 476/479.1125, 476/479.2125, 470/473.0750, and 470/473.1000 MHz for public safety services as requested in the captioned application **IS GRANTED**.

16. **IT IS FURTHER ORDERED** that, pursuant to Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 337(c), that File No. 0001801202 **SHALL BE PROCESSED** consistent with this *Order* and the Commission's Rules.

17. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0131, 0331.

FEDERAL COMMUNICATIONS COMMISSION

Michael J. Wilhelm
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